

Converged Organization and Processes – Planning for Service Success

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What Will Be Covered

- Two Common Mistakes Organizations Make
- Addressing the Converged Organization
 - Do I converge support groups?
 - Training – what voice professionals need to know.
 - Training – what data professionals need to know.
 - Don't forget the Help Desk
 - Building bridges between groups effectively.
 - Leveraging the different support groups.
- Adopting the Right Support Model
 - Service Management Model
 - An Introduction to FCAPs
 - Critical Process #1 – Configuration Management
 - Critical Process #2 – Change Management
- Management Tools and Support
 - Why Your Budget Should Include Tools
 - Add these (functions) to your tool kit...
 - Leveraging Management Tools to Measure Success

Two Common Mistakes

- Organizations Don't Focus Sufficient Attention on How to Converge Organizations
 - Converging may not be right for your environment
 - Overwhelming majority – the data organization “wins” by default
 - Organizations can lose important voice talent without understanding its value
- Organizations Don't Pay Enough Attention to How Processes Need to Change
 - Typical assumption – “Our existing (data) processes will work for a converged network.”
 - Often overlooks additional reporting and management tool requirements
 - Voice planning addresses different needs with different demands
 - Frequently fails to provide sufficient controls to maintain a quality environment for all applications and voice

You Want to Go Which Way?



Do I Converge Support Groups?

- Typically, Yes. But Maybe Not If...
 - You have particularly critical voice applications (Call Center, Telemarketing)
 - You have a very large number of handsets and a more “specialized” support structure improves quality
 - Merging organizations may be untenable politically or due to personalities
- While You May Benefit From Converging Organizations, Don't Assume It's Automatically Right
- Carefully Assess Your Staff, Your Goals, and Your Processes and Procedures

Do I converge support groups – Real Benefits

- Wellcome Trust saved 30% in ongoing support costs (PublicTechnology.net Article)
- On-going support cost savings of up to 35% (Yankee Group)
- Major county in IL reduced Telephony Support costs by 58% (Network World 2005)
- Average organization reduces staff requirements by .74FTE (Network World 2006)
- The "TV Disclaimer" – Results May Vary

Making Your Converged Organization Work

- The People
 - Carefully examine relationships between managers and staff
 - Make sure all staff receive appropriate training
 - Gauge acceptance of user community to management changes
 - Understand how well your staffs communicate prior to the changes
 - Prior to implementation, start sharing projects/planning
- Don't let the Data Group "Win" by Default
- The Processes
 - Understand where planning process match and differ
 - Examine how help desk issues will be handled (and by whom)
 - Don't ignore benefits from self-service applications
 - Don't count on 100% acceptance of self-service applications
 - Find common ground for reporting, planning, communication
- Don't Let the Process Lose Voice-Specific Skills/Practices

What do I need to know if I'm a voice person?

- Basic Elements of Packet Switching (as opposed to Circuit Switching)
- Role of Routers, Switches, Gateways, Security Devices
- How to isolate problems in a Packet Switched Environment
- Basics of Quality of Service
- Understanding Interaction of Traffic Streams and Network Capabilities

What do I need to know if I'm a data person?

- Basic Elements of Circuit Switching (as opposed to Packet Switching)
- Basic Elements of PBX systems and feature sets such as dial plans, signaling, etc.
- The difference between control and bearer traffic and their tolerances to delay, jitter (delay variance) and packet loss
- How to isolate voice problems on the network
- Voice specialists like other applications specialists will see their application as the most important on the network

Don't Forget the Help Desk!

- A Converged Help Desk Requires Significant Attention
 - Cross-Training of Voice/Data Individuals
 - Compiling FAQs and Common Solutions
 - Building appropriate “Trees” to support triage and ticket assignment
- On the Job Training is Likely to Contribute to Perceptions of Failure
 - Public Face of the Support Group
 - Magnifies Minor Problems into Major Issues

How to Help the Help Desk

- Support Your Pilot With the Converged Help Desk
- Rotate Subject Matter Experts Through to Share Knowledge, Assist in Problem Identification
- Be as Clear as Possible on Ticket Assignment Procedures and Responsible Parties
- Routinely Review Results with Help Desk and Subject Matter Experts
- Explicitly Task Someone With Documenting Lessons Learned and Common Issues
- Clearly Define the Help Desk's Role

Building Bridges Effectively

- Voice and Data Groups Often Start From Very Different Places
 - Technical Vocabularies
 - Competition Between Groups
 - Planning Processes and Objectives
- Address Communications Early
 - Create Voice/Data Pairs Prior to Converging Support Groups
 - Ensure Adequate Training
 - Phase in Support Structure With Pilot
 - Focus on Re-Tasking/Re-Training, Not FTE Reduction
- Document, Describe, Discuss
 - Teams Should Document Existing Systems and Future Plans
 - White Paper on Architectures/Systems to Describe in Some Detail
 - Joint Team Meetings to Discuss, Answer Questions, and Explore Issues

Leveraging Different Support Groups

- Converged Communications Should not Mean Data Group Primacy
 - Key Voice Skills Should Be Preserved
 - Key Voice Processes Should be Incorporated
 - Critical Voice Troubleshooting Talent Will Be Required
- Actively Work to Merge Processes Effectively
- Goal Should be to Create “Convergence Specialists”
- Ensure You Can Support
 - Call Volume Planning
 - Call Quality Planning
 - Key Monitoring and Reporting

New Technology Model –New Management Model

Service Management	<ul style="list-style-type: none">➤ Comprehensive visibility➤ Anticipating return➤ Highly Secure➤ Highly flexible
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System Management	<ul style="list-style-type: none">➤ Focus on high quality, high performance voice services➤ Aligned with end user needs➤ Blend of proactive and reactive➤ Coordination with voice and data groups➤ Active Implementation of SLA's
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Element Management	<ul style="list-style-type: none">➤ Focus on technology➤ Reactive in nature➤ Best available effort
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Managing Converged Network Services

- Shift in Focus To:
 - Ability to reach services usefully (not just a ping)
 - Visibility into quality of critical services (and not just up-time)
 - Meaningful reporting to various audiences
- Can You...
 - ...build a compensation plan around meeting Service Level Objectives/Agreements?
 - ...leverage management/monitoring tools to demonstrate value to the business?
 - ...evaluate the quality of communications in addition to the raw volume?

FCAPS

- ITU based management framework
- Divides management functions into domains:
 - Fault Management
 - Configuration Management
 - Accounting Management
 - Performance Management
 - Security Management
- While domains address different functions, they are mutually related and supportive.
- Select tools that help you “plug holes” in processes and/or staff relating to a domain
- Requires that you evaluate processes to address functional domains effectively

FCAPS Domains

Fault Management	Configuration Management	Accounting Management	Performance Management	Security Management
alarm handling	system turn-up	track service usage	data collection	control NE access
trouble detection	network provisioning	bill for services	report generation	enable NE functions
trouble correction	Auto discovery		data analysis	access logs
test and acceptance	back up and restore			
network recovery	database handling			

Configuration Management

- A Converged Network Environment Creates Opportunities for Unexpected Consequences
 - Configuration Changes Intended to Address One Issue Create Unexpected Problems for Other Applications
 - Quality of Service Configurations Can Create Artificial “Bandwidth Starvation”
 - Security Controls May Create “Denial of Service” Issues for Valid Traffic.
- Management Processes Should Be Capable of:
 - Tracking Multiple Versions of Configurations
 - Providing Configuration Templates to Standardize/Simplify New Implementations
 - Analyzing Potential Modifications to Gauge Impact

Change Management

- Related to Configuration Management, But Different
 - Focuses on Process of Making Modifications Rather Than Tracking Version History
 - Provides Controls on Acceptable Types and Times for Configuration Modifications
 - Details Required Performance Parameters That Any Configuration Must Meet
- Good Processes Will:
 - Routinely/Automatically Inspect Configurations to Identify Changes
 - Provide a Standard Process for Evaluating Proposed Modifications
 - Limit “On The Fly” Changes to Emergency/Critical Situations
 - Provide Enhanced Quality Through Testing and Examination

Why Your Budget Should Include Management Tools:

- Bad Assumptions Prevalent:
 - Existing Data Tools Are Sufficient
 - Knowing Latency/Jitter/Loss Will Be Enough
 - 5 Minute Averages Will Be Sufficient
 - 30 Day History Will Allow Good Forecasting
- Converged Networks and Service Support Changes The Equation
 - Tools Need Enhancements to Understand Specific Flows and Performance
 - Tools Need to Understand the Intersection of Latency/Jitter/Loss
 - Some Real-Time Capabilities (Likely) Required for Troubleshooting
 - Engineering for the Future Requires Understanding Seasonal Growth and Load

Add These (Functions) To Your Tool Kit

- Focus on FCAPS Approach to Select Tools
- Fault Management
 - Sends Alerts When Faults Detected
 - Correlates Issues to Assist in Problem Isolation
 - Ability to Monitor Services, Devices, and Links
- Configuration Management
 - Support for Standard Templates
 - Change Detection (and Action?)
 - Batch Update/Change Processing
 - Simple Rollback to Earlier Configuration

Add These (Functions) To Your Tool Kit

- Accounting Management
 - Call Detail Records Analysis
 - Usage Reporting (Phone or Data)
 - Bill Analysis/Comparison
 - Chargeback
- Performance Management
 - Critical Parameter Reporting and Alerts
 - Usage Trend Analysis from Multiple Sources
 - Performance Forecasting
- Security Management
 - Authentication Tracking
 - Suspicious Activity Alerts
 - Availability of Critical Resources
 - Correlation to Performance/Accounting Data

Leverage Management Tools To Measure Success

- Management Tools Should Provide “Useful Reports”
 - Calling Volume Processed Per Hour/Day/Month
 - Call Quality (Average or Spot Check)
 - Key Performance Metrics for Your Enterprise
- Use Management Platforms to Demonstrate Success
 - Build Summary Reports for Management
 - Use SLA Achievement for Incentives
 - Tailor Reports to Match Department/Business Unit Goals
- Investment Shouldn’t Be “Just” on Break/Fix Support
- Selecting the Right Tools Will Help Change Support Perspective

Key Points to Take Home

- Converged Communications Requires More Than Technology
 - Support Structures Must Adjust
 - Support Models Must Adapt
 - “End-to-End” Changes More Than “Just” The Network
- Key Focus For Most Organizations
 - Leverage Strengths When Combining Support Groups
 - Improve Configuration Management
 - Implement Change Management

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QUESTIONS?

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